

### **REMARKS**

Prior to the present amendment, claims 1-18 were canceled and 19-27 were added as a result of a preliminary amendment filed on May 1, 2008. By the present amendment, applicants have canceled claims 19-27 and have added new claims 28-33. Accordingly, claims 28-33 are under examination. No new matter has been introduced by these amendments.

### **Objections to Specification**

On page 2 of the office action, the examiner objects to the specification because it contains an embedded hyperlink and/or other form of browser-executable code. The examiner cites pages 6, 26, 45, and 94. In response, applicants have removed the hyperlink and/or other form of browser-executable code on pages 6, 26, 45, and 94. Accordingly, applicants respectfully request that the objections be withdrawn.

On page 2 of the office action, the examiner states that the application fails to comply with the requirements of 37 CFR 1.821 through 1.825. The examiner specifies that the sequence identifiers are missing from pages 29-43, 46-93, and 126-131. In response, applicants submit herewith a sequence listing as a text file (.txt). The content of the sequence listing does not extend beyond the original disclosure.

Applicant has also amended the specification to accord the appropriate sequence identifying numbers for the sequences disclosed throughout the specification. Applicant submits herewith a substitute specification excluding claims with markings to indicate all of

the desired changes to accord appropriate SEQ ID NOs. Applicant also submits herewith a clean version of the substitute specification excluding claims (without markings). No new matter has been introduced as a result of the amendments. No new matter has been introduced as a result of the amendment or substitute specifications to accord sequence identifying numbers. Applicant respectfully requests entry of the new specification into the above-identified application and withdrawal of the objections to the specification.

**Rejection under 35 U.S.C. § 112, second paragraph**

On page 3 of the office action, the examiner rejects claims 19-27 as being indefinite under 35 U.S.C. § 112, second paragraph for reciting “RKS4 gene.” The examiner states that the term is arbitrary and creates ambiguity in the claims. However, the examiner states that amendment of the claim to refer to a specific SEQ ID NO would obviate the rejection. In addition, the examiner rejects claim 27 as being indefinite for reciting “a method for providing resistance to a plant or plant cell.” The examiner states that it is unclear to what the plant is being resistant.

Merely in order to expedite prosecution, applicants have canceled claims 19-27 and added new claims 28-33. The new claims further recite a RKS4 gene comprising SEQ ID NO: 46. Support for this amendment can be found, for example, on page 64-65 of the specification as filed. In addition, new claim 33 clearly states that the method is for providing *pathogen* resistance. Support for this amendment can be found, for example, on page 131 and 132 of specification as filed. Accordingly, applicant believes that the rejections are moot and respectfully requests withdrawal of the rejections.

**Rejection under 35 U.S.C. § 112, first paragraph**

On page 4 of the office action, the examiner rejects claims 19-27 under 35 U.S.C. § 112, first paragraph for not complying with the written description requirement. The examiner alleges that the specification does not identify essential regions of any RKS4 protein. The examiner also alleges that the specification does not describe a representative number of sequences encoding a RKS4 protein. The examiner acknowledges that the specification discloses the *Arabidopsis thaliana* RKS4 cDNA sequence on page 64-65.

Merely in order to expedite prosecution, applicants have canceled claims 19-27 and added new claims 28-33. The new claims clearly recite a RKS4 nucleotide sequence. Support for this amendment can be found, for example, on page 64-65 of the specification as filed. Applicant respectfully requests reconsideration and withdrawal of the rejection.

**Rejection under 35 U.S.C. § 112, first paragraph**

On page 6 of the office action, the examiner rejects claims 19-27 under 35 U.S.C. § 112, first paragraph for not complying with the enablement requirement. The examiner alleges that the specification does not disclose a RKS4 sequence that is modified or a plant in which the expression of said sequence is modified, resulting in a plant comprising the claimed phenotypes. According to the examiner, undue experimentation would be required for one skilled in the art to screen through a multitude of sequences in order to identify those, if any, that when over-expressed produce a plant with the claimed phenotypes.

Applicant respectfully disagrees. The specification as originally filed provides details sufficient to provide guidance to one of ordinary skill in the art to make and use the claimed invention. See, for example, page 16, lines 24-26; page 17, lines 12-14; pages 64-65; page 106, lines 6-24; page 131-133; figures 6-13 and the brief description of figures 6-13 on page 95, line 18 through page 98, line 9 of the specification as filed.

Briefly, the specification discloses a RKS4 gene nucleic acid sequence and states, for example, that increasing the level of "RKS genes results in an increase in organ size, growth rate and yield." In addition, decreasing the levels of endogenous RKS gene product decreases the size of plant organs, the growth rate, or the total plant size. The specification provides details and results concerning increasing and decreasing development of a plant or plant cell and details concerning increasing or decreasing expression of a RKS4 gene. Accordingly, applicant respectfully requests reconsideration and withdrawal of the rejection.

**Rejection under 35 U.S.C. § 102 in view of Clark**

On page 8 of the office action, the examiner rejects claims 19-27 as being anticipated by Clark, *et al.* (1993, *Development*, 119: 397-418) in view of Meyerowitz, *et al.* (1999, US Patent 5,859,338). The examiner states that the term "RKS4 gene" is indefinite, as discussed above. The examiner therefore interpreted the term to include any gene that produces the claimed plant phenotypes.

Applicant respectfully disagrees. Claims 28-33 recite a RKS4 sequence. The Clark reference is devoid of any disclosure of a RKS4 gene, especially a RKS4 gene comprising a nucleotide sequence as set forth in SEQ ID NO 46. Accordingly, the claimed invention

cannot be said to be anticipated by Clark. Applicant respectfully requests reconsideration and withdrawal of the rejection.

**Rejection under 35 U.S.C. § 101**

On page 10 of the office action, the examiner rejects claims 19-27 for being directed to non-statutory subject matter. According to the examiner, the claims do not sufficiently distinguish over plants or plant cells as they exist naturally.

Applicant respectfully disagrees. Merely in order to expedite prosecution, applicant has canceled claims 19-27 and added new claims 28-33. The new claims recite increasing or decreasing expression of a RKS4 gene in a plant or plant cell by recombinant means. Accordingly, the claims are not directed to naturally-occurring products. Support for the recitation can be found, for example, on page 106, lines 6-24; figures 6-13 and the brief description of figures 6-13 on page 95, line 18 through page 98, line 9 of the specification as filed. Accordingly, applicant respectfully requests reconsideration and withdrawal of the rejection.

**Conclusion**

In view of the foregoing amendments and remarks, entry of the amendments and favorable consideration of the claims are respectfully requested. If the examiner has any questions or concerns regarding this amendment, he is invited to contact the undersigned at the telephone number listed below.

Appl. No: 10/521,518  
Applicant: Eduard Daniel Leendert Schmidt  
Our Docket: 294-208 PCT/US  
Response to Non-Final Office Action  
Page 13 of 13

If any fees are due or any over overpayment made in connection with this paper,  
please charge or credit our Deposit Account No.: 08-2461.

Respectfully submitted,

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